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Applicant: Parkin et al. Serial No.: 09/766,344

Title: MEANS AND METHODS FOR MONITORING PROTEASE INHIBITOR

ANTIRETROVIRAL THERAPY AND GUIDING THERAPEUTIC DECISIONS IN THE

TREATMENT OF HIV/AIDS

Attorney Docket No.: 11068-033-999

CAJD: 363324.1

PATENT COOPERATION TREATY

From the INTERNATIONAL SEARCHING AUTHORITY

Amend Prior Rub: 2/19/04@

NIKOLAS C. GEORGE PENNIE & EDMONDS LLP NOTIFICATION OF TRANSMITTAL OF 1155 AVENUE OF THE AN INTERPRED TO D. POULTO THE INTERNATIONAL SEARCH REPORT NEW YORK, NY 10036 REC'D OR THE DECLARATION JAN 06 2004 (PCT Rule 44.1) Pennie & Edmunus Date of Mailing 19 DEC 2003 O.K. for filling (day/month/year) Applicant's or agent's file reference FOR FURTHER ACTION See paragraphs 1 and 4 below 11068-26-228 International filing date International application No. (day/month/year) PCT/US03/04362 V 14 February 2003 (14.02.2003) Applicant VIROLOGIC, INC. The applicant is hereby notified that the international search report has been established and is transmitted herewith. ı. 🛛 Filing of amendments and statement under Article 19: The applicant is entitled, if he so wishes, to amend the claims of the international application (see Rule 46): The time limit for filing such amendments is normally two months from the date of transmittal of the Where? Directly to the International Bureau of WIPO, 34, chemin des Colombettes 1211 Geneva 20, Switzerland, Facsimile No.: (41-22) 740.14.35 For more detailed instructions, see the notes on the accompanying sheet. The applicant is hereby notified that no international search report will be established and that the declaration under Article 17(2)(a) to that effect is transmitted herewith. With regard to the protest against payment of (an) additional fee(s) under Rule 40.2, the applicant is notified that: the protest together with the decision thereon has been transmitted to the International Bureau together with the applicant's request to forward the texts of both the protest and the decision thereon to the designated Offices. no decision has been made yet on the protest; the applicant will be notified as soon as a decision is made. 4. Reminders Shortly after 18 months from the priority date, the international application will be published by the International Bureau. If the applicant wishes to avoid or postpone publication, a notice of withdrawal of the international application, or of the priority claim, must reach the International Bureau as provided in Rules 90 bis.1 and 90 bis.3, respectively, before the completion of the technical preparations for international publication. Within 19 months from the priority date, but only in respect of some designated Offices, a demand for international preliminary examination must be filed if the applicant wishes to postpone the entry into the national phase until 30 months from the priority date (in some Offices even later); otherwise the applicant must, within 20 months from the priority date, perform the prescribed acts for entry into the national phase before those designated Offices. In respect of other designated Offices, the time limit of 30 months (or later) will apply even if no demand is filed within 19 months. See the Annex to Form PCT/IB/301 and, for details about the applicable time limits, Office by Office, see the PCT Applicant's Guide, Volume II, National Chapters and the WIPO Internet site. Authorized officer Name and mailing address of the ISA/US Mail Stop PCT, Attn: ISA/US J. S. Parkin V Commissioner for Patents P.O. Box 1450 Telephone No. (703) 308-1111

Alexandria, Virginia 22313-1450 Facsimile No. (703) 305-3230

PATENT COOPERATION TREATY

PCT.

INTERNATIONAL SEARCH REPORT

(PCT Article 18 and Rules 43 and 44)

Applicant's or agent's file reference 11068-26-228	FOR FURTHER ACTION	see Notification of Transmittal of International Search Report (Form PCT/ISA/220) as well as, where applicable, item 5 below.					
International application No. PCT/US03/04362	International filing date (day/mont 14 February 2003 (14.02.2003)	h/year)	(Earliest) Priority Date (day/month/year) 15 February 2002 (15.02.2002)				
Applicant VIROLOGIC, INC.							
This international search report has been prepared by this International Searching Authority and is transmitted to the applicant according to Article 18. A copy is being transmitted to the International Bureau. This international search report consists of a total of Ω sheets.							
It is also accompanied by a copy of each prior art document cited in this report.							
 Basis of the Report With regard to the language, the international search was carried out on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item. 							
the international search was carried out on the basis of a translation of the international application furnished to this Authority (Rule 23.1(b)). b. With regard to any nucleotide and/or amino acid sequence disclosed in the international application, the international search was carried out on the basis of the sequence listing:							
l <u>=</u>	contained in the international application in written form.						
	filed together with the international application in computer readable form.						
	his Authority in written form.	orm					
	furnished subsequently to this Authority in computer readable form.						
international application as	the statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.						
the statement that the infor	the statement that the information recorded in computer readable form is identical to the written sequence listing has						
	Certain claims were found unsearchable (See Box I).						
	With regard to the title, the text is approved as submitted by the applicant.						
	ed by this Authority to read as follow	s:					
5. With regard to the abstract,							
the text is approved as sub-		. A	on it annears in Ray III The annicent may				
the text has been established within one month from the	ed, according to Rule 38.2(b), by this date of mailing of this international	search repor	as it appears in Box III. The applicant may, n, submit comments to this Authority.				
6. The figure of the drawings to be pu	ublished with the abstract is Figure N	io	M				
as suggested by the applica			None of the figures				
because the applicant failed							
because this figure better c	haracterizes the invention.						

INTERNATIONAL SEARCH REPORT

International application No.

PCT/US03/04362

A. CLASSIFICATION OF SUBJECT MATTER						
IPC(7) : C12Q 1/70, 1/68, 33/573; A61K 39/21; C07H 21/04						
US CL : 435/5, 6/, 7.4, 424/188.1, 208.1; 536/23.72, 24.3						
According to International Patent Classification (IPC) or to both national classification and IPC						
B. FIELDS SEARCHED						
Minimum documentation searched (classification system followed by classification symbols)						
U.S.: 435/5, 6/, 7.4, 424/188.1, 208.1; 536/23.72, 24.3						
		veent that c	uch documents are included in	the fields searched		
Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched						
Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)						
Electronic dat	ta base consulted during the international scarcii (name L, WPIDS, MEDLINE		• • • •	· .		
USPAITULI	, wido, mediane		•	·		
C. DOC	UMENTS CONSIDERED TO BE RELEVANT		 γ	Relevant to claim No.		
Category *	Citation of document, with indication, where ap	1-38				
Y	WO 00/078996 A1 (VIROLOGIC, INC.) 28 Decemb	1-38				
	document.			1-38		
Y	PARTALEDIS, J. A., et al. In vitro selection and ch	1-30				
	immunodeficiency virus type 1 (HIV-1) isolates with					
	hydroxyethylamino sulfonamide inhibitors of HIV-1	aspartyi pro	itease. J. virot. September			
	1995, Vol. 69, No. 9, see entire document.					
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			See patent family annex.			
Further	r documents are listed in the continuation of Box C.					
• 8	special categories of cited documents:	-T-	later document published after the inte date and not in conflict with the applic	ation but cited to understand the		
"A" documen	defining the general state of the art which is not considered to be		principle or theory underlying the inve	ention		
of particu	ilar relevance	***	demand of marticular relevance: the	claimed invention cannot be		
		"X"	considered novel or cannot be considered	red to involve an inventive step		
1	oplication or patent published on or after the international filing date		when the document is taken alone			
"L" documen	which may throw doubts on priority claim(s) or which is cited to	*Y*	document of particular relevance; the	claimed invention cannot be		
establish specified	the publication date of another citation or other special reason (as	1	ideand to involve an inventive sign	when the document is		
1			combined with one or more other such being obvious to a person skilled in th	1 GOCUMENTS, SUCH COMPUTATION		
"O" documen	a referring to an oral disclosure, use, exhibition or other means					
"P" documen	t published prior to the international filing date but later than the	"&"	document member of the same patent	family		
	date claimed			-l		
Date of the actual completion of the international search		Date of m	nailing of the international sear	сп героп		
		1	9 DEC 2003			
12 December 2003 (12.12.2003)		Authorize				
1	ailing address of the ISA/US	Amin'i	7			
	Mail Stop PCT, Attn: ISA/US Commissioner for Patents J. S. Parkin					
Commissioner for Patents P.O. Box 1450			• No : (703) 308-1111			
Alc	Alexandria, Virginia 22313-1450					
Persionile No	. (703) 305-3330	1				

NOTES TO FORM PCT/ISA/220 (continued)

The letter must indicate the differences between the claims as filed and the claims as amended. It must, in particular, indicate, in connection with each claim appearing in the international application (it being understood that identical indications concerning several claims may be grouped), whether

- (i) the claim is unchanged;
- (ii) the claim is cancelled;
- (iii) the claim is new;
- (iv) the claim replaces one or more claims as filed;
- (v) the claim is the result of the division of a claim as filed.

The following examples illustrate the manner in which amendments must be explained in the accompanying letter:

- [Where originally there were 48 claims and after amendment of some claims there are 51]:
 "Claims 1 to 29, 31, 32, 34, 35, 37 to 48 replaced by amended claims bearing the same numbers;
 claims 30, 33 and 36 unchanged; new claims 49 to 51 added."
- 2. [Where originally there were 15 claims and after amendment of all claims there are 11]: "Claims 1 to 15 replaced by amended claims 1 to 11."
- 3. [Where originally there were 14 claims and the amendments consist in cancelling some claims and in adding new claims]: "Claims I to 6 and 14 unchanged; claims 7 to 13 cancelled; new claims 15, 16 and 17 added." or "Claims 7 to 13 cancelled; new claims 15, 16 and 17 added; all other claims unchanged."
- [Where various kinds of amendments are made]:
 "Claims 1-10 unchanged; claims 11 to 13, 18 and 19 cancelled; claims 14, 15 and 16 replaced by amended claim 14; claim 17 subdivided into amended claims 15, 16 and 17; new claims 20 and 21 added."

"Statement under Article 19(1)" (Rule 46.4)

The amendments may be accompanied by a statement explaining the amendments and indicating any impact that such amendments might have on the description and the drawings (which cannot be amended under Article 19(1)).

The statement will be published with the international application and the amended claims.

It must be in the language in which the international application is to be published.

It must be brief, not exceeding 500 words if in English or if translated into English.

It should not be confused with and does not replace the letter indicating the differences between the claims as filed and as amended. It must be filed on a separate sheet and must be identified as such by a heading, preferably by using the words "Statement under Article 19(1)."

It may not contain any disparaging comments on the international search report or the relevance of citations contained in that report. Reference to citations, relevant to a given claim, contained in the international search report may be made only in connection with an amendment of that claim.

Consequence if a demand for international preliminary examination has already been filed

If, at the time of filing any amendments and any accompanying statement, under Article 19, a demand for international preliminary examination has already been submitted, the applicant must preferably, at the time of filing the amendments (and any statement) with the International Bureau, also file with the International Preliminary Examining Authority a copy of such amendments (and of any statement) and, where required, a translation of such amendments for the procedure before that Authority (see Rules 55.3(a) and 62.2, first sentence). For further information, see the Notes to the demand form (PCT/IPEA/401).

Consequence with regard to translation of the international application for entry into the national phase

The applicant's attention is drawn to the fact that, upon entry into the national phase, a translation of the claims as amended under Article 19 may have to be furnished to the designated/elected Offices, instead of, or in addition to, the translation of the claims as filed.

For further details on the requirements of each designated/elected Office, see the PCT Applicant's Guide, Volume II.